18 16

STEREO CONTROL AMPLIFIER

KC-207

REMOTE CONTROL UNIT

RC-70/RC-70E/RC-70X

INSTRUCTION MANUAL

KENWOOD

©PRINTED IN JAPAN B50-8707-00(K,P,U,UE,M,X)(T)
88/12 11 10 9 8 7 6 5 4 3 2 1

Introduction

Your choice of this product indicates that you are a devotee to excellence in sound reproduction.
We appreciate your patronage and take pride in the long tradition of quality components, that our company represents.
So that you can get the most out of your unit, we suggest that you take the time to read through this manual before you hook up and operate your system. This will acquaint you with operating features, and system-connection considerations, so that your listening pleasure will be enhanced right from the start. You will notice that in all aspects of planning, engineering, styling, operating convenience and adaptability, we have sought to anticipate your needs and desires.
Keep this manual handy for future reference.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.
Model KC-207 Serial Number _____

Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.
Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.
We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

Accessories

- Remote control unit 1
- Battery (SUM-3, "AA" or "R6") 2
- RCA pin-plug cord 1
- System control cord 1

Contents

Caution : Read the following pages marked in ⚠ carefully to keep your safety.

⚠ Before applying power 2
⚠ Safety precautions 2
⚠ Important safeguards 3-4
System connections 5-6
System control connections and operation 7-8
Controls and indicators 9-10
Operating instructions 11-12
Sound equalization 13
Remote control/RC-70/RC-70E/RC-70X 14-17
In case of difficulty 18
Specifications 19

18 16

Before applying power

⚠ **Caution : Read this page carefully to keep your safety.**

Important!

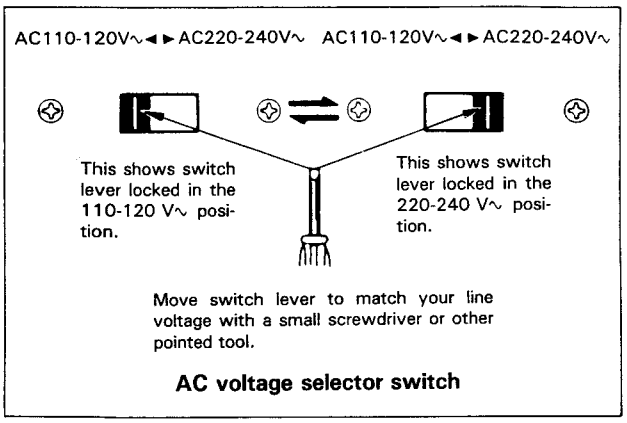
U.S.A., Canada, and Australia
Units shipped to the U.S.A. and Canada are designed for operation on 120 volts AC only. Units shipped to the Australia is designed for operation on 240 volts AC only. These units are not equipped with an AC voltage selector switch and the discussion of such a switch that follows should be disregarded.

All other countries
Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

AC voltage selection

This unit operates on 110-120 or 220-240 volts AC. The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

Note:
Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.


AC110-120V∿◄►AC220-240V∿ AC110-120V∿◄►AC220-240V∿
This shows switch lever locked in the 110-120 V∿ position.
This shows switch lever locked in the 220-240 V∿ position.
Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

AC voltage selector switch

Safety precautions

Safety precaution for AC plug (for U.S.A and Canada)
CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

WARNING:
TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
⚡	THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.
!	THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

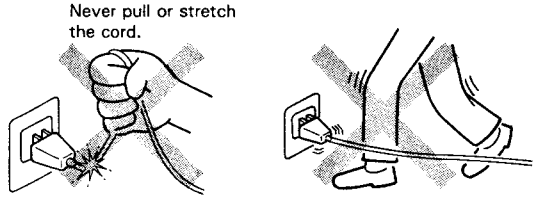
Important safeguards

⚠Caution : Read this page carefully to keep your safety.

Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

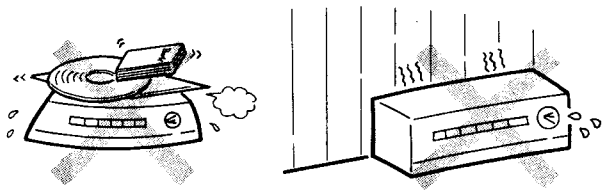
1. **Power sources** — The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

2. **Power-cord protection** — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

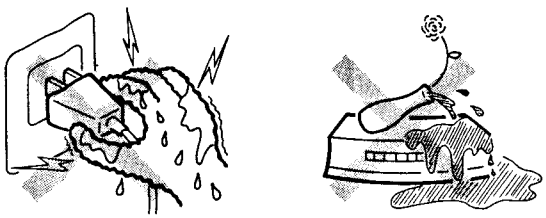


3. **Grounding or polarization** — Precautions that should be taken so that the grounding or polarization means of this unit is not defeated.

4. **Ventilation** — The unit should be situated so that its location or position does not interfere with its proper ventilation.
To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls.
Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings.

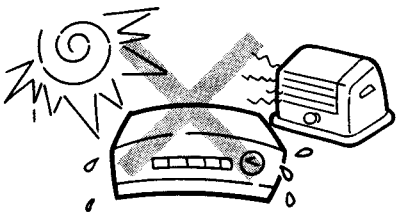


5. **Water and moisture** — The unit should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

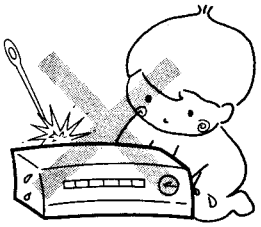


6. **Temperature** — The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).

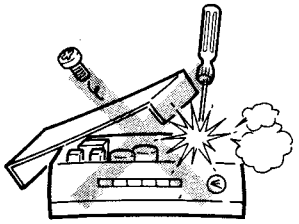
7. **Heat** — The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.



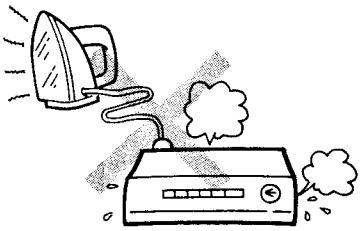
8. **Electric shock** — Care should be taken so that object do not fall and liquid are not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.



9. **Enclosure removal** — Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.



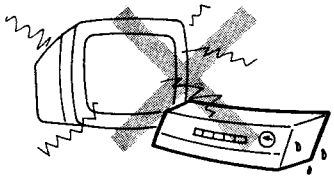
10. **AC outlets** — Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical units, such as an iron or toaster, to it to prevent fire or electric shock.



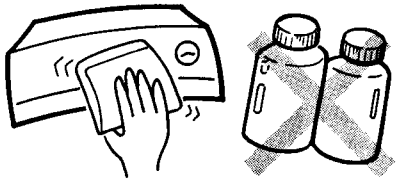
The maximum capacities indicated for the AC outlets on the rear panel of the this unit are as follows.

SWITCHED outlets ; 680 W

11. Magnetic fields — Keep the units away from a source of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.

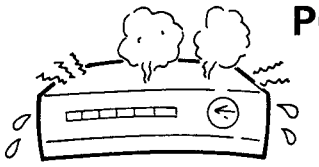


12. Cleaning — Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.



13. Nonuse periods — The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.

14. Abnormal smell — If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service station.



15. Damage requiring service — The unit should be serviced by qualified service personnel when:

A. The power-supply cord or the plug has been damaged; or

B. Objects have fallen, or liquid has been spilled into the unit; or

C. The unit has been exposed to rain; or

D. The unit does not appear to operate normally or exhibits a marked change in performance; or

E. The unit has been dropped, or the enclosure damaged.

16. Servicing — The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

---

17. Outdoor antenna grounding — If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/ NFPA No. 70—1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.

[a] Use No. 10 AWG (5.3 mm²) copper, No. 8 AWG (8.4 mm²) aluminum, No. 17 AWG (1.0 mm²) copper-clad steel or bronze wire, or larger, as a ground wire.

[b] Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 — 6 feet (1.22 — 1.83 m) apart.

[c] Mount antenna discharge unit as close as possible to where lead-in enters house.

[d] Use jumper wire not smaller than No. 6 AWG (13.3 mm²) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21(j).

18. Power lines — An outdoor antenna should be located away from power lines.

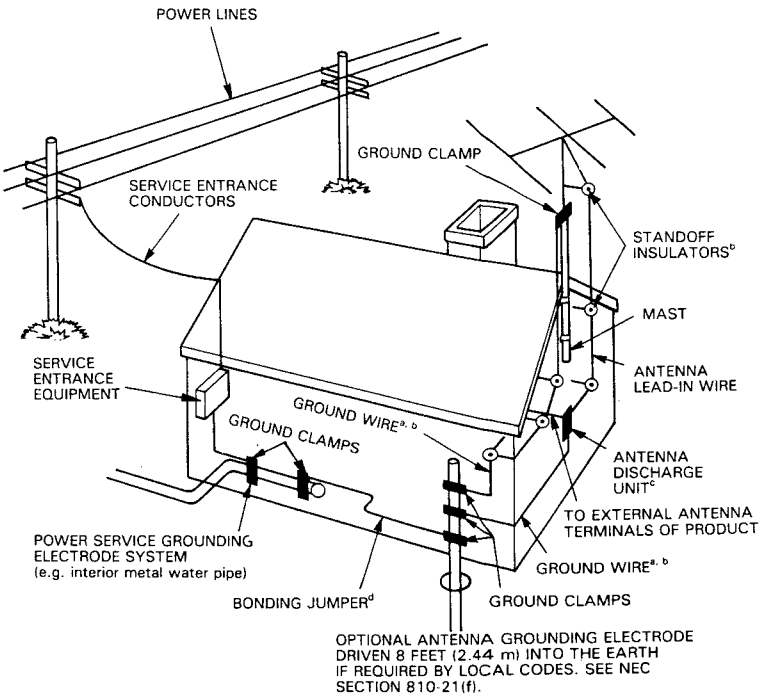
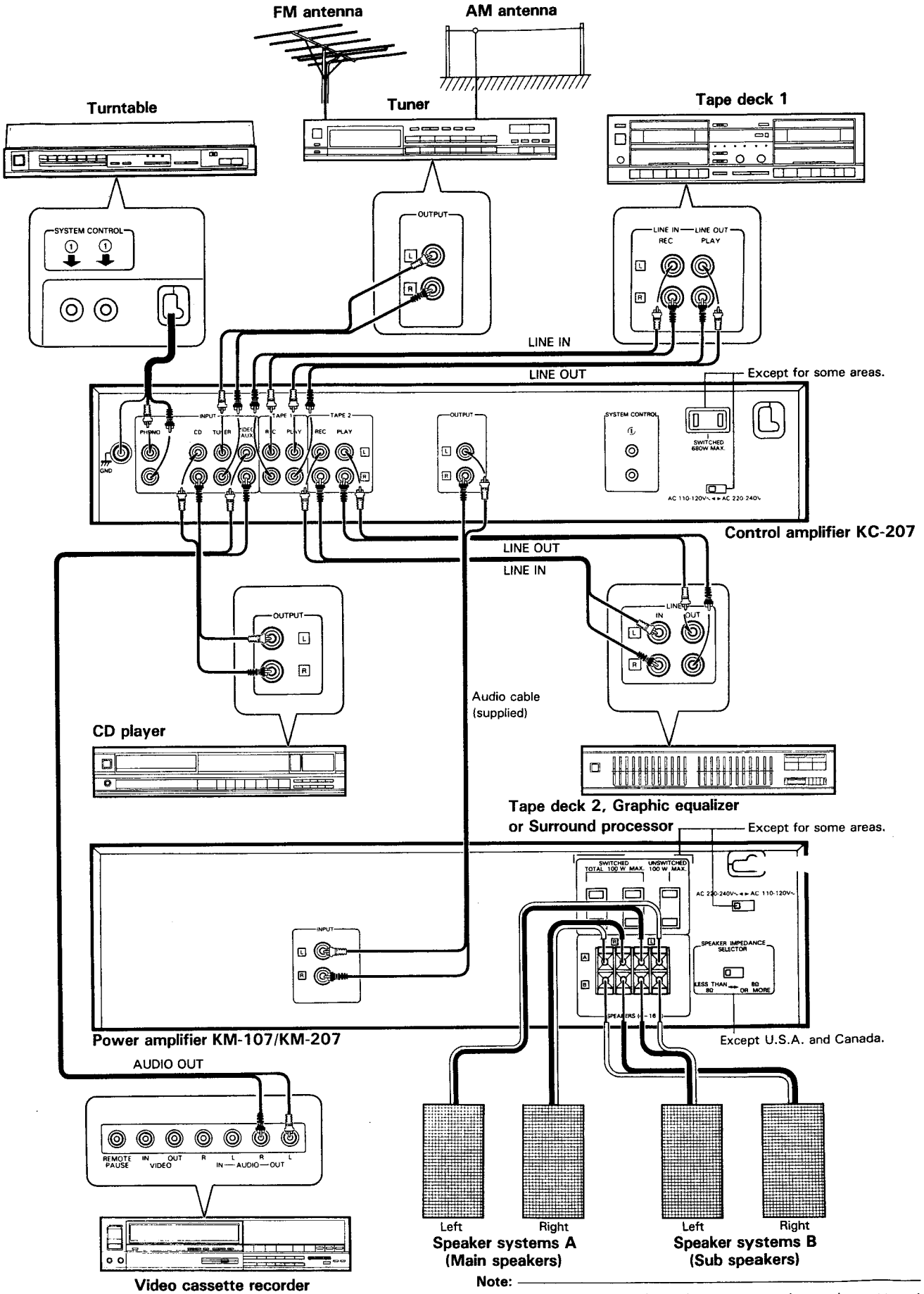

POWER LINES
GROUND CLAMP
SERVICE ENTRANCE CONDUCTORS
STANDOFF INSULATORS[b]
MAST
ANTENNA LEAD-IN WIRE
SERVICE ENTRANCE EQUIPMENT
GROUND WIRE[a, b]
GROUND CLAMPS
ANTENNA DISCHARGE UNIT[c]
TO EXTERNAL ANTENNA TERMINALS OF PRODUCT
POWER SERVICE GROUNDING ELECTRODE SYSTEM (e.g. interior metal water pipe)
GROUND WIRE[a, b]
BONDING JUMPER[d]
GROUND CLAMPS
OPTIONAL ANTENNA GROUNDING ELECTRODE DRIVEN 8 FEET (2.44 m) INTO THE EARTH IF REQUIRED BY LOCAL CODES. SEE NEC SECTION 810-21(f).

FIGURE
EXAMPLE OF ANTENNA GROUNDING ACCORDING TO THE NATIONAL ELECTRICAL CODE INSTRUCTIONS CONTAINED IN ARTICLE 810 — "RADIO AND TELEVISION EQUIPMENT"

Notes:

1. Item 3 is not required except for grounded or polarized equipment.
2. Item 10 is not required except for units provided with AC outlets.
3. Item 17 and 18 are not required except for units provided with antenna terminals.

System connections



Note:

If incompatible equipment is used, system control operations may not function. For connection to the components with which the synchronized operations are possible, refer to pages 7 - 8.

Power amplifier

Connect the OUTPUT jacks of the KC-207 and the INPUT jacks of a power amplifier with the supplied audio cable.

Notes:

1) The AC cord of the power amplifier should be plugged into a wall outlet.
2) To prevent possible trouble, always disconnect the power plug or turn off the POWER switch of the power amplifier before connecting or disconnecting the audio cables.
3) When connecting audio cables, always insert the pin plugs exactly into the connecting jacks.
   Insufficient insertion may result in no-sound trouble or generation of noise.

Turntable

The PHONO jacks of the amplifier can accept a turntable with an MM type phono-cartridge.
Your stereo turntable has RCA pin-plug cords that is terminated with phono plugs. Plug the left channel plug into the [L] and the right channel plug into the [R] PHONO jacks.
If the turntable has a ground wire, connect it to the unit's GND terminal to avoid hum.

Ground

For maximum safety and minimum interference connect the GND terminal to a good earth ground if practicable. A good earth ground is a cold water pipe or a metal stake driven into moist earth. However, never use a gas pipe for this purpose.

CD player

The CD jacks are used to connect a CD player.
Connect the left channel of the CD player to the [L] CD input jack and right channel of the CD player to the [R] CD input jack.

Note:

Do not connect the CD player to the PHONO jacks.

Tuner

Use the TUNER jacks for connection to an FM stereo or AM-FM stereo tuner.
Connect the left channel of the tuner to the [L] TUNER input jack and the right channel of the tuner to the [R] TUNER input jack.

Video cassette recorder

Use the VIDEO 1/AUX or VIDEO 2 jacks for connection to audio output of a video cassette recorder.
Connect the left channel of the recorder to the [L] VIDEO 1/AUX or VIDEO 2 input jack and the right channel of the recorder to the [R] VIDEO 1/AUX or VIDEO 2 input jack.

Other audio equipments

The VIDEO 1/AUX jacks are used to connect other high level signal sources, such as a audio output of a video disc player, etc.

Tape decks

If only one tape deck is to be connected to the system it is recommended that it be connected to the jacks marked TAPE 1.
Tape deck input and output cables are normally terminated with phono plugs.

Playback

Plug the left and right output cables of the tape deck into the [L] and [R] TAPE 1 PLAY jacks.

Record

Plug the left and right input cables of the tape deck into the [L] and [R] TAPE 1 REC jacks.

Second tape deck

Plug the input and output cables from the second tape deck into the REC and PLAY jacks marked TAPE 2.

AC outlets (Except for some areas)

The AC outlets on the rear panel may be used to supply power to other components in the system, such as turntables, tape decks, etc. Never connect equipment whose power consumption exceeds the maximum value shown at each outlet.

SWITCHED outlets:

This outlet supply power only when the unit is turned on. The maximum total capacity is 680 watts.

Note:

Be sure to connect the speaker cords before connecting the AC outlet.

System control connections operation

Connection

Using the system control cord provided witht the KENWOOD system component models make connection as below.

Operation

1. Automatic play operation

When starting play with the CD player, turntable or tape deck etc. connected to the Amplifier or receiver, press the desired INPUT SELECTOR switch on the amplifier or receiver. The CD player, turntable or tape deck etc. will automatically enter the play mode.

In the same way, pressing the Play key of the CD player, turntable or tape deck etc. will automatically switch the INPUT SELECTOR on the amplifier or receiver to the equipment on which the Play key is pressed.

2. Synchro recording

To record the sound from the CD player or turntable onto the tape with the cassette deck, press the PLAY (START) key of the CD player. The cassette deck will start recording automatically, synchronized with the CD player starting play. For more details, refer to the instruction manual of the cassette deck.

3. Remote control.

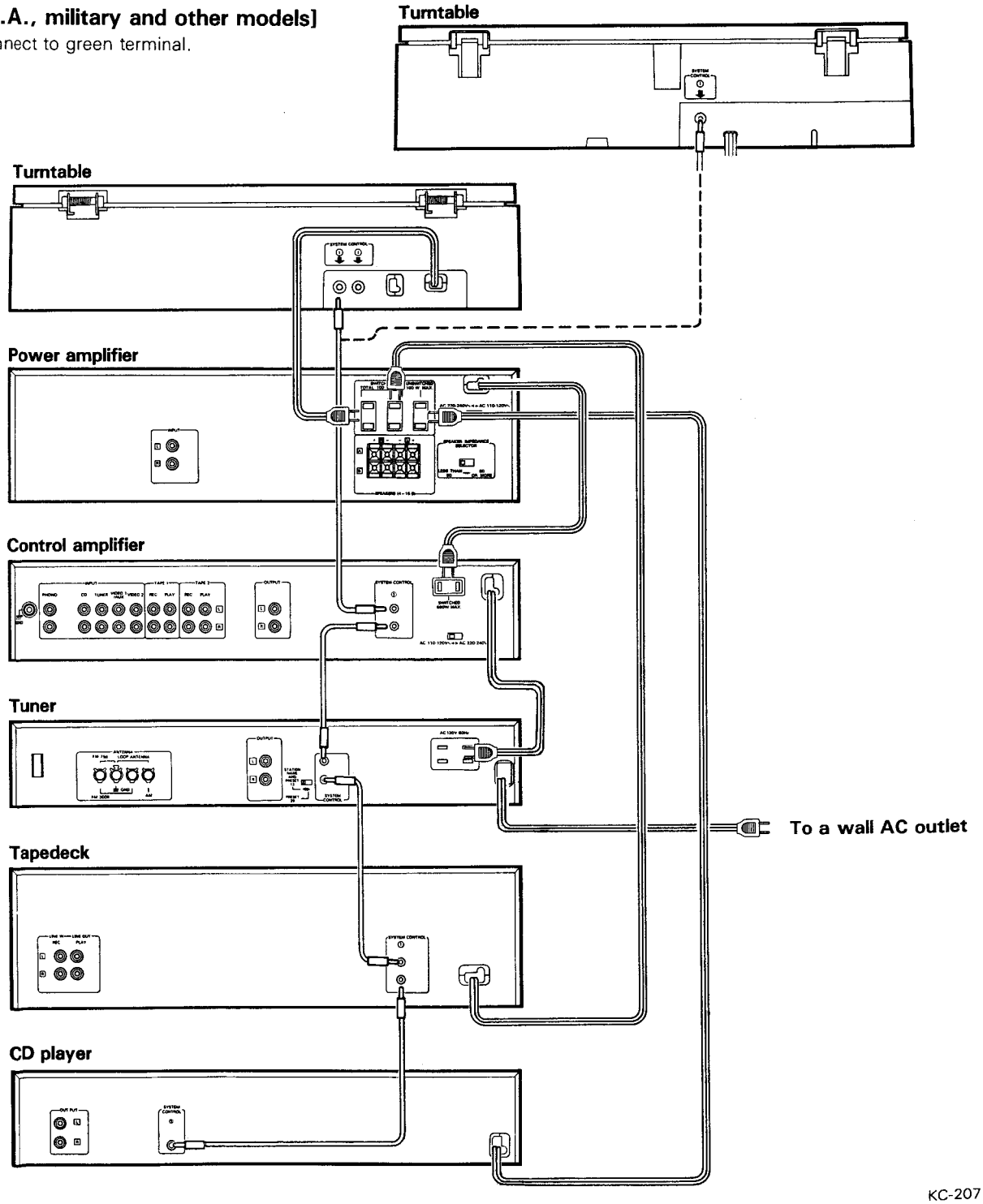
When the remote control unit provided with the KENWOOD amplifier or receiver, remote control can be carried out.

Note:

1. System control operation of the unit connected to the TAPE 2 jacks can not be carried out.
2. For connections of the audio cords, refer to the "System connections" diagram.

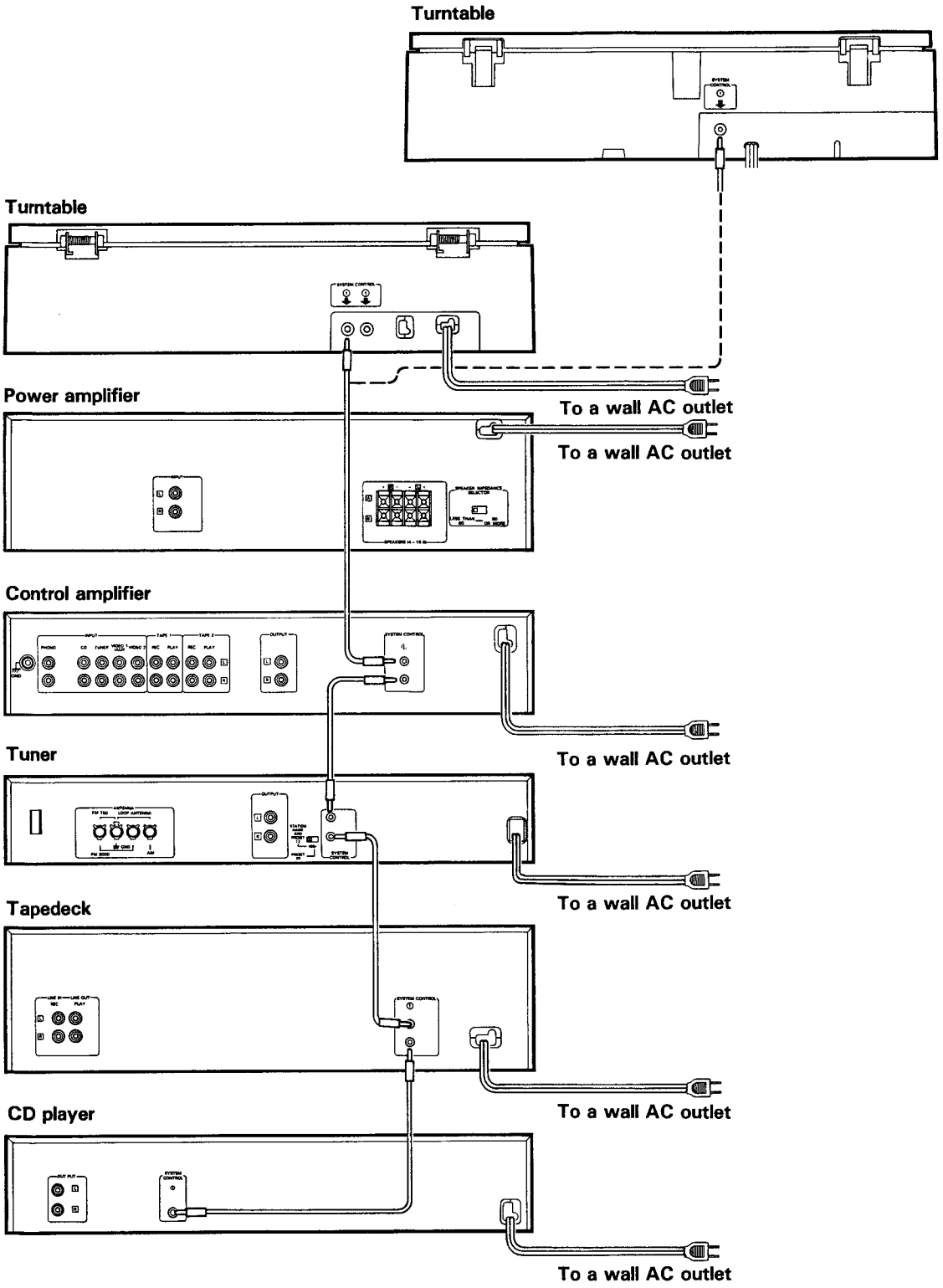
[U.S.A., military and other models]

- Connect to green terminal.

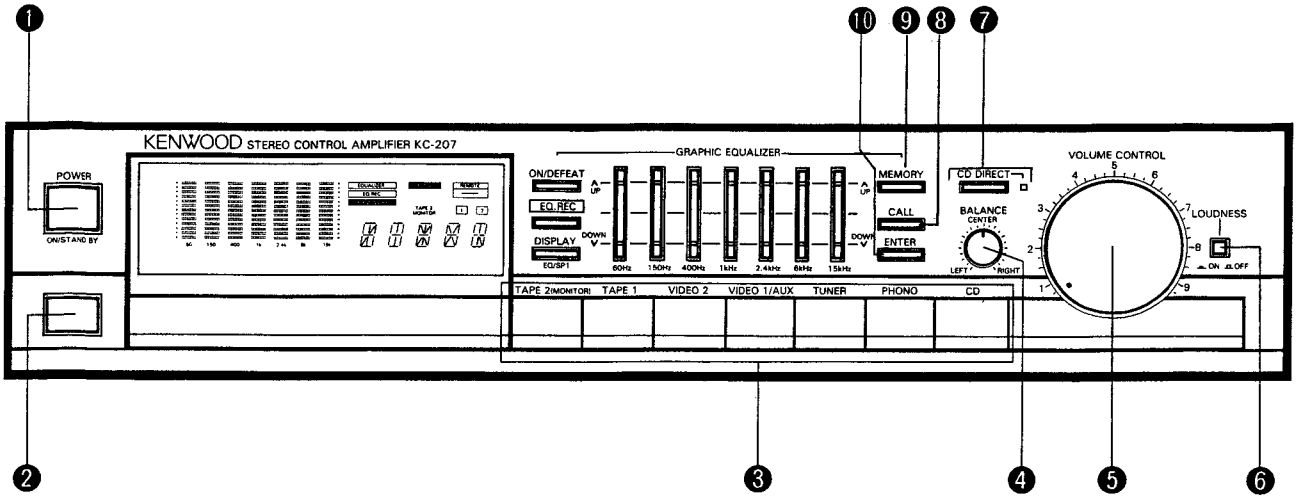


[Australia models]

• Connect to green terminal.



Controls and indicators



❶ POWER switch

When this switch is set to ON, the entire system becomes operative, and when set to STAND BY, the system is tuned OFF, while the remote control enters the STAND BY mode.

❷ Infrared remote control sencer

❸ Input selector switches

TAPE-2: Press this switch when a component such as a graphic equalizer is connected to the TAPE 2 jacks.

Notes:

1. The TAPE-2 selector switch has a priority over the input selector switches. To listen to the source other than tape deck 2, be sure to set this switch to OFF.
2. Do not press the TAPE-2 switch while recording on the cassette deck connected to the TAPE-2 jacks.
3. To monitor with a three-head tape deck, set the tape deck accordingly.

TAPE-1: To listen to a source from the tape deck connected to the TAPE 1 jacks, press this switch.

VIDEO-2: To listen to an audio source from video cassette recorder connected to the VIDEO 2 jacks, press this switch.

VIDEO-1/AUX: To listen to a source from the equipment connected to the VIDEO 1/AUX jacks, press this switch.

TUNER: To listen to a source from the tuner connected to the TUNER jacks, press this switch.

PHONO: To listen to a source from the turntable connected to the PHONO jacks, press this switch.

CD: To listen to a source from the CD player connected to the CD jacks, press this switch.

Note:

The setting of the input selector switch is backed up for a few days even when the POWER plug is disconnected.
After this period, the TUNER is automatically selected when the power is supplied.

❹ BALANCE control

This control permits balancing of left and right channels when an imbalance exists from the sound source, or to correct acoustic imbalance due to room conditions. Turn it to the left from the CENTER position to boost the left channel; turn it to the right of the CENTER position to raise the level of the right channel.

❺ VOLUME CONTROL

This control adjusts left- and right-channel volume simultaneously. Set it for the desired listening level.

❻ LOUDNESS switch

The loudness switch boosts bass response to compensate for the human ear's lack of response to those frequencies at low volume levels. Press this switch according to your listening level.
When the VOLUME CONTROL knob is set below "3 ~ 4", loudness response is effective.

❼ CD DIRECT key

When this key is pressed ON, the CD sound is heard from the speakers in priority.
When the CD DIRECT key is ON, it is possible to record another source while listening to the CD playback.
CD DIRECT mode will not be released even when the POWER switch is turned ON/OFF.
To release CD DIRECT mode, press any of the input source switch other than CD, or press the CD DIRECT key again.

❽ CALL switch

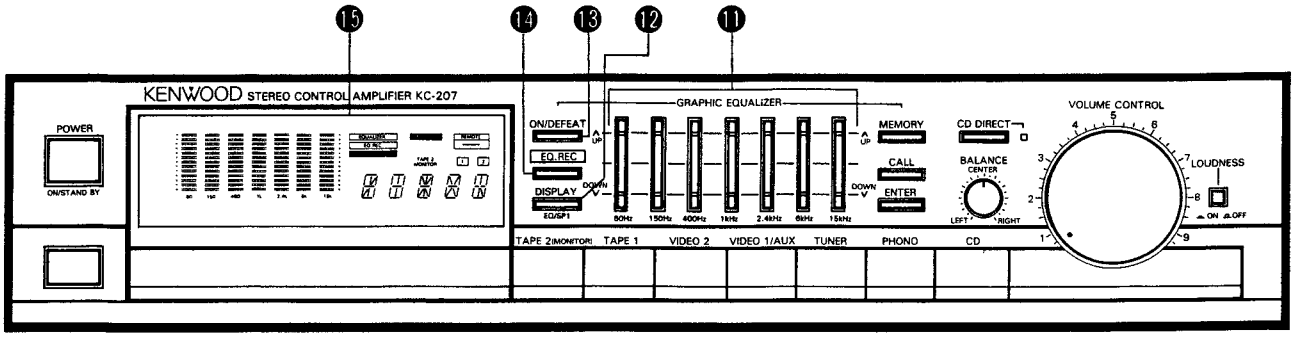
Press this switch when you want to recall a previously stored equalizer pattern, or when you want to store an equalizer curve.
Each time this switch is pressed, the display shows "EQ-1", "EQ-2", ... or "EQ-5". When the display reads "EQ-5" and the switch is pressed again, the display shows "EQ-1", and then the previous display resumes.

❾ MEMORY switch

This switch is used when storing the desired equalizer pattern in memory. The MEMORY indicator lights up, and the unit enters the memory standby mode.
Approx. 5 seconds after the MEMORY key is pressed, the previous mode will resume.

❿ ENTER switch

This switch is used when storing a desired equalizer pattern in memory. After using the GRAPHIC EQUALIZER control keys to adjust the pattern to be memorized, press the MEMORY key and select the desired preset channel (EQ-1 to EQ-5) in which you want to store the pattern. Press the ENTER key. The equalizer pattern will be stored in the selected preset channel.
Approx. 5 seconds after the ENTER key is pressed, the input selector display will resume.



⓫ GRAPHIC EQUALIZER control keys (7-element, UP/DOWN)

Each time the UP or DOWN key of any of these control keys is pressed, the response will be changed by 1 step (±2 dB). The controllable range is ±12 dB in 6 steps.
When this key is kept depressed for more than 0.5 seconds, the response is changes rapidly.
When this key is pressed while the spectrum analyzer display is shown. The display is changed to the graphic equalizer, and then the spectrum analyzer display resumes approx. 5 seconds after equalizer controlling is over.

⓬ DISPLAY switch

This switch is used to select the display mode by alternating between the graphic equalizer and the spectrum analyzer modes.
However, when a graphic equalizer operation is performed during display of the spectrum analyzer, or vice versa, the display is changed automatically to the currently operating mode. Approx. 5 seconds later after operation is finished, the previously selected display will resume.

⓭ ON/DEFEAT switch

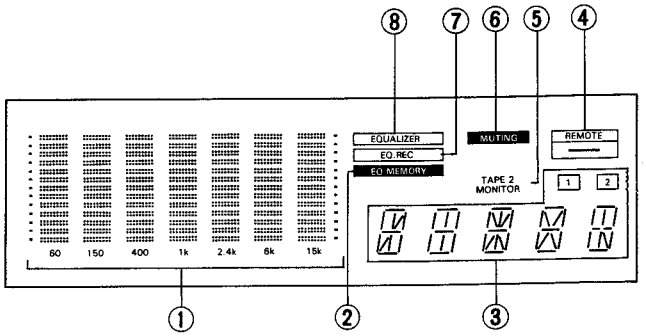
Set this switch to ON to activate the graphic equalizer circuitry. When this switch is set to DEFEAT, a flat frequency response is obtained regardless of the GRAPHIC EQUALIZER control setting.

⓮ EQ REC switch

Set this switch to ON to record an equalized sound onto the tape deck connected to TAPE 1 REC jacks. When this switch is set to OFF, the sound with a flat frequency response is recorded onto the tape deck connected to TAPE 1 REC jacks.

Input source for listening, the program sources, to be recorded with A and B cassette decks can be selected individually.

⓯ Display window



① **Display**
Graphic equalizer display:
Displays the equalized effect level applied to the source selected by the input selector switches.
Spectrum analyzer display:
Displays the output level for each frequency band of the source selected by the input selector switches.

② **EQ MEMORY indicator**
This indicator lights up for approx. 5 seconds when the MEMORY switch is pressed.

③ **Input mode/equalizer channel display**
Displays the source selected by the input selector switches and the equalizer channel selected by the CALL switch.

④ **REMOTE indicator**
Blinks when the signal from the remote controller is accepted.

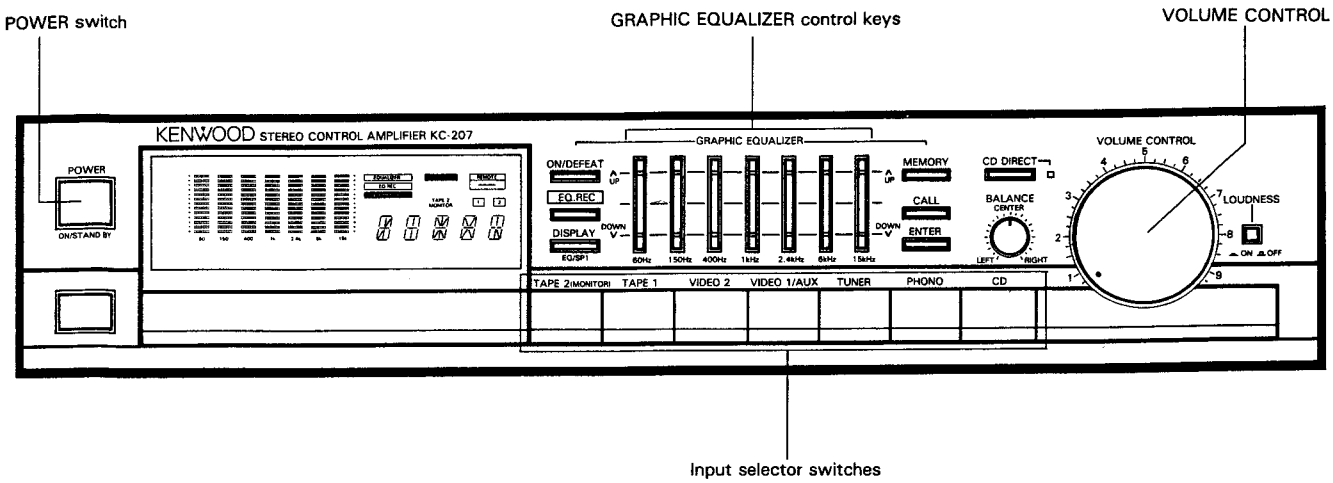
⑤ **TAPE 2 indicator**
Lights when the TAPE 2 key is pressed.

⑥ **MUTING indicator**
This indicator lights up when the MUTING key on the remote control is pressed.
This indicator also blinks (for approx. 5 seconds) when the muting function is engaged immediately after the power is turned ON.

⑦ **EQ. REC indicator**
This indicator lights up when the EQ. REC switch is pressed.

⑧ **EQUALIZER indicator**
This indicator lights up when the ON/DEFEAT switch is pressed.

Operating instructions



To listen to program source

1. Press the POWER switch.
2. Select the program source to be played with the input selector switches or TAPE-2 selector switch.
   When the SYSETM CONTROL connector on the rear panel is connected as shown in the figure on page 12, pressing the input selector switch sets the specified unit to play mode.
3. Play the program source.
4. Adjust the volume level with the VOLUME CONTROL.
5. To equalize the listening sound, press the ON/DEFEAT switch and adjust the GRAPHIC EQUALIZER controls.

(The operations 1 ~ 4 can be performed with the remote controller.)

Note:

When the TAPE-2 selector switch is set to ON, the program source selected with input selector switch cannot be heard from the speakers. To listen to the program source other than tape deck 2, be sure to set the TAPE-2 selector switch to OFF.

To record program source (TUNER, CD, PHONO, VIDEO-1/AUX, VIDEO-2)

1. Press the POWER switch.
2. Select the program source to be recorded with the input selector switch (TUNER, CD, PHONO, VIDEO-1/AUX, VIDEO-2).
   When the SYSTEM CONTROL connector on the rear panel is connected as shown in the figure on page 12, pressing the input selector switch sets the specified unit to play mode.
3. Play the program source.
4. Set tape deck 1 and/or tape deck 2 to record mode.
5. To equalize the recording sound, press the EQ REC switch and adjust the GRAPHIC EQUALIZER controls.
6. To equalize the listening sound, press the ON/DEFEAT switch.

(The operations 1 ~ 4 and 6 can be performed with the remote controller.)

Note:

The equalizer sound can only be recorded with tape deck 1.

Tape-to-tape dubbing

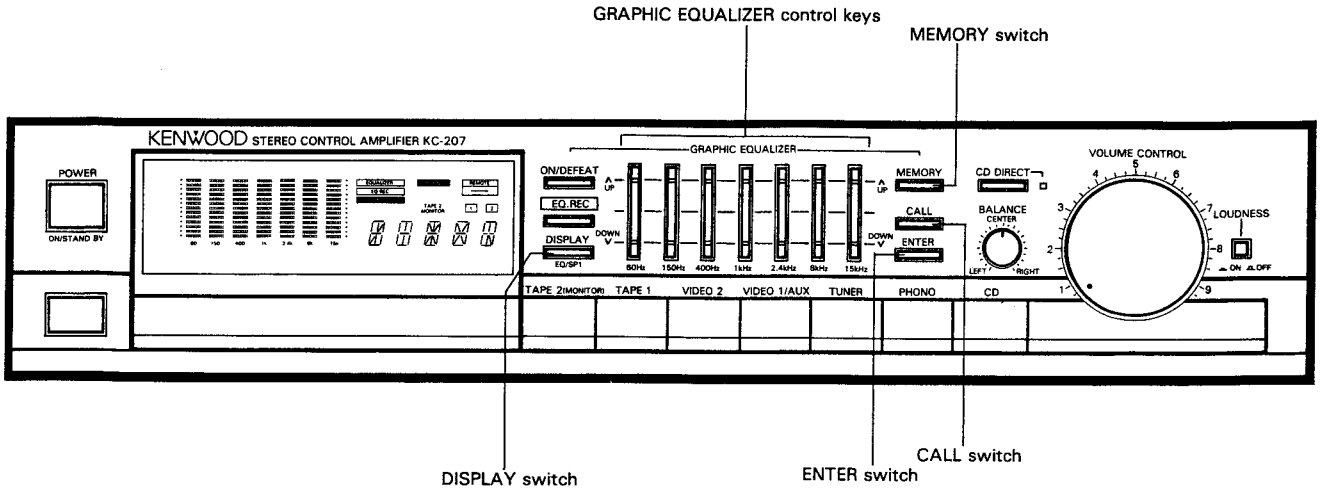
- **Dubbing from tape deck 2 to tape deck 1**

1. Press the POWER switch.
2. Press TAPE-2 selector switch and the input selector switch other than TAPE-1.
3. Set tape deck 2 to play and tape deck 1 to record.
4. To equalize the recording sound, press the EQ REC switch and adjust the GRAPHIC EQUALZIER controls.

(The operations 1 ~ 3 can be performed with the remote controller.)

Notes:

1. Do not press TAPE-1 input selector switch during dubbing.
2. To listen to the equalized recording sound, press the ON/DEFEAT switch.



How to store the graphic equalizer patterns

This unit allows you to store in memory up to 5 equalizer patterns for instant recall.

1. Press the DISPLAY switch to set the display to the graphic equalizer mode.
2. Adjust the GRAPHIC EQUALIZER control keys to obtain the desired equalizer pattern.
3. Press the MEMORY switch. The MEMORY indicator lights up in the display.
4. Within approx. 5 seconds after pressing the MEMORY switch, press the CALL switch to select the desired equalizer channel (EQ-1 to EQ-5) in which you want to store the equalized pattern.
5. Press the ENTER switch to store the equalized pattern in memory.
6. To recall a preset equalizer pattern which has already been stored, press the CALL switch.

Display window

- **Spectrum analyzer display:**

To display, press the DISPLAY switch to change the display to the spectrum analyzer mode.
It displays the output level to the LINE OUT jacks for each frequency of the program source signal selected by the input selector switches.

- **Graphic equalizer display:**

Press the DISPLAY switch to change the display to the graphic equalizer mode.
Even while the spectrum analyzer display mode is activated, the display shows the graphic equalizer mode for approx. 5 seconds in the following cases:

1. When the POWER switch is turned ON.
2. When any of the GRAPHIC EQUALIZER control keys is pressed.
3. When the MEMORY switch is pressed.
4. When the CALL switch is pressed.

In these cases, approx. 5 seconds later, the spectrum analyzer display will resume.

Sound equalization

● Super bass range (60 Hz)

When these controls are moved up, the bass instrument (double bass, bass drums or pipe organ, etc.) sound is increased.
When the super bass sound is boomy, move these controls down.

● Bass range (150 Hz)

Usually, the resonance frequency of the listening room is in this range.
To eliminate bass resonance, move these controls down.

● Mid-bass range (400 Hz)

This range is the basis of music. Whether the sound is rich or not, depends on this range. When the playback sound is not so good, adjust these controls.

● Mid range (1 kHz, 2.4 kHz)

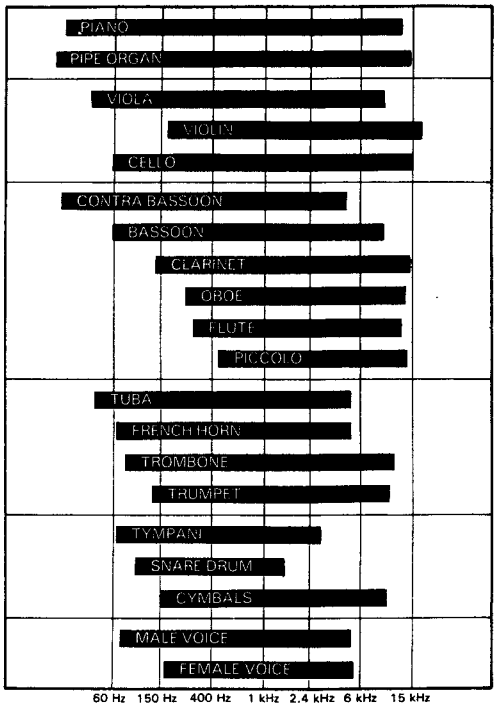
When these controls are moved up or down, the bariton or soprano voice is emphasised/de-empha-sised. This range is related to the "presence" of the music.

● High range (6 kHz)

This frequency range is related to the hardness of the sound. When this control is moved up, strings or brass, such as flute or piccolo, is emphansed. When the control is moved down, the sound will be more soothing.

● Super high range (15 kHz)

This frequency range is related to the details of the music. When these controls are moved up, super high frequency instruments, such as triangle or cymbal, are emphasized, resulting in wide sound and echoes.



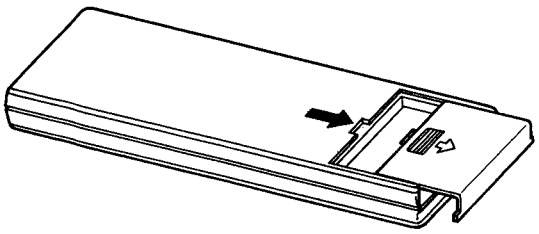
Remote control/RC-70/RC-70E/RC-70X

Notes

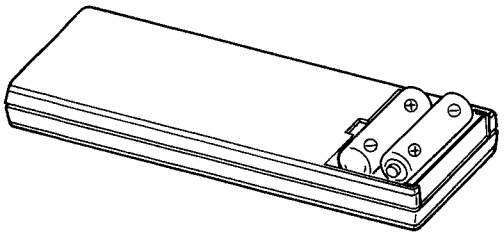
- **When the power plug is connected to an AC outlet, this unit enters the power standby mode and the indicator lights. At that time, the unit can be operated only with the POWER key of remote control transmitter.**
  First, enter the unit to the power on mode with the POWER key of remote control transmitter, and operate with the other keys.

Installing the battery on the remote control unit

1. Remove the battery compartment cover.



2. Insert two size "AA" (R6) batteries confirming the correct polarity and close the cover in its place.



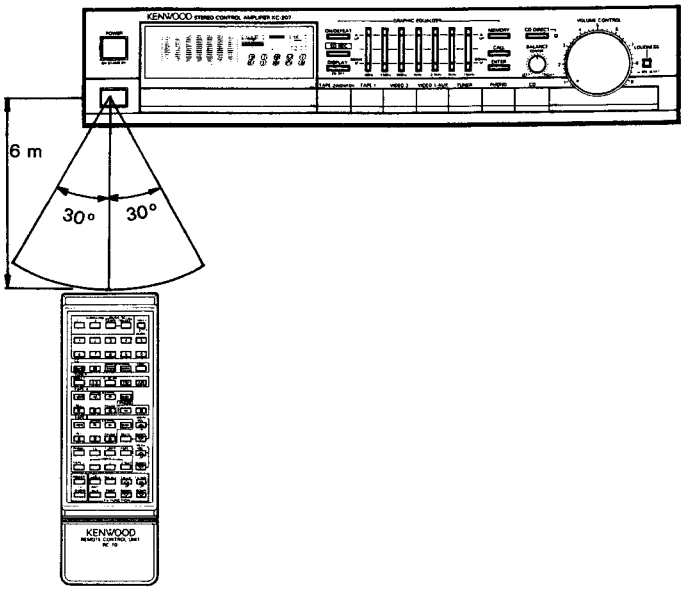
Note:

The provided batteries are to be used for operation of the remote control unit, and it may have shorter life.
When the remote control unit becomes effective only for shorter distance or does not effective to operate, replace them with two new batteries.

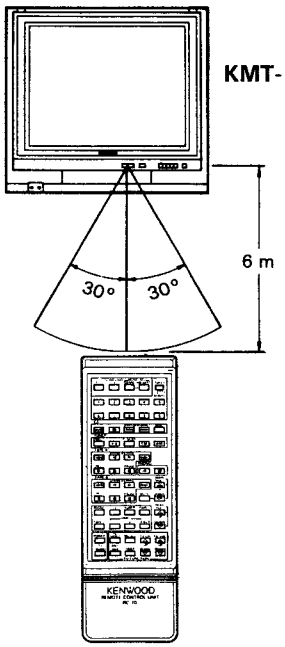
Usable range of remote control unit

The usable range of the remote control unit may differ on temperature, humidity or using conditions, however, it is defined approximately as shown in the figure below:

For controlling audio



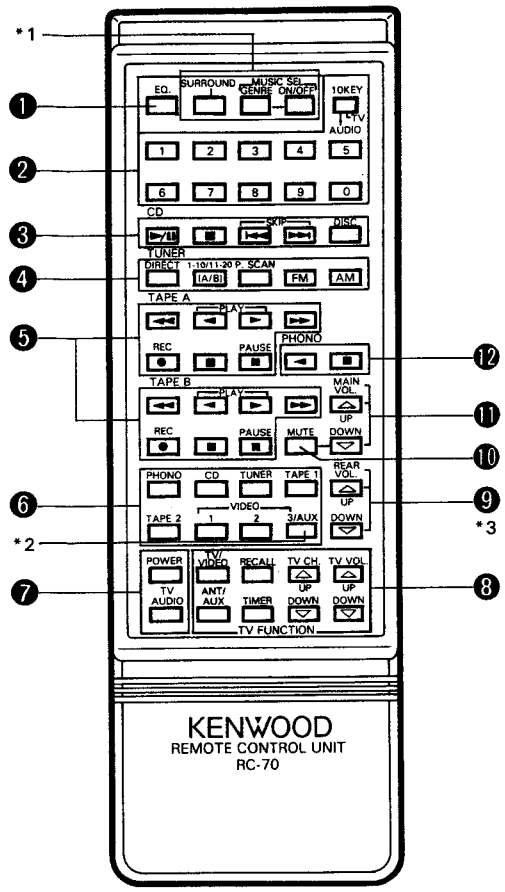
For controlling TV set (U.S.A. and military models)



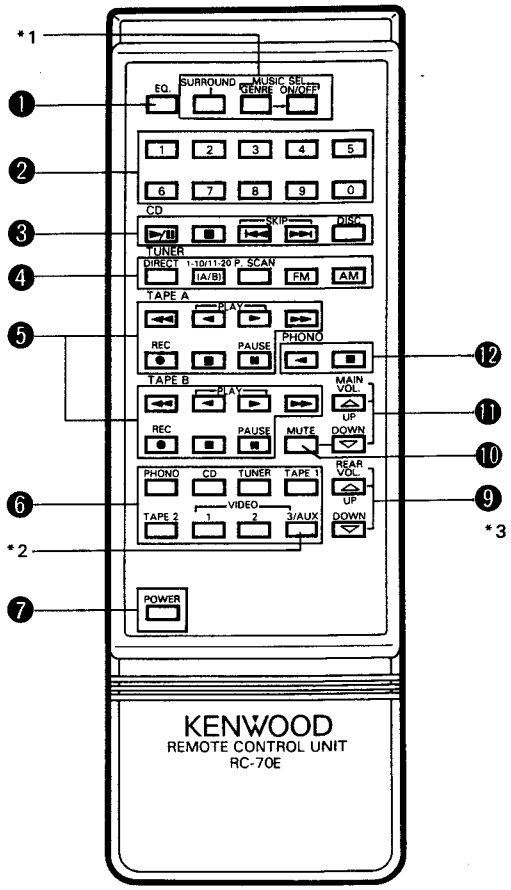
Note for remote control operation

After pressing one of operation keys, when the next operation is required, press the next operation key firmly after approx. 1 second interval.
When the next operation key is pressed immediately after the previous key, it may cause misoperation.

Remote control unit (U.S.A. and military models)



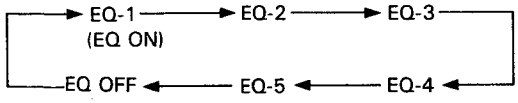
Remote control unit (Other model)



Note:
***1, *2 VIDEO 3/AUX and *3 REAR VOL. (UP/DOWN) do not function with this unit.**

❶ GRAPHIC EQUALIZER key (EQ.)

When this key is pressed once, the graphic equalizer pattern stored in EQ-1 is recalled and displayed in the display window. After then, if it is kept depressed, the stored equalizer patterns will be recalled with the display showing "EQ-2", ... "EQ-5". Then this key is pressed again, the graphic equalizer function will be released.



❷ 10-KEY MODE switch (U.S.A. and military models)

AUDIO: 10-key direct operation is possible only for tuner and CD player.
(For example: When "7" is pressed while listening to track No. 4 of CD player, the track No, is changed to 7.)

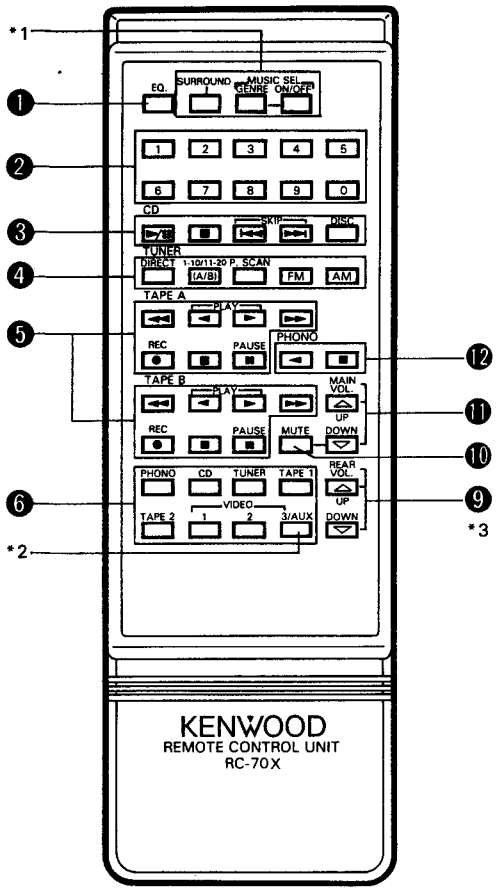
TV: 10-key direct operation is possible only for TV. Use buttons "0-9" in combination for direct channel selection regardless of any previous memory settings or functions. Generally, key in channel numbers in two digits for speedy operation. To key in lower channel numbers from 2 ~ 9, key in "0", then the channel number. (For example, to tune in channel 9 directly, key in "0", then "9", for channel 23, key in "2", then "3", etc.)

❷ 10-key (other and Australia models)

10-key direct operation is possible only for tuner and CD player. (Effective only when the DP-87 is used with this unit.)
(For example: When "7" is pressed while listening to track No. 4 of CD player, the track No, is changed to 7.)

Note: If you do not press the second key within two seconds after pressing the first key, the first number keyed in will be automatically selected as the channel number.

Remote control unit (Australia model)

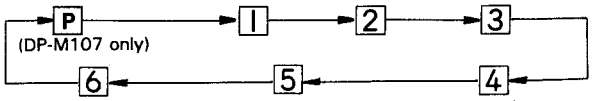


Note:
POWER switch is omitted.

❸ Compact disc player (DP-87/DP-57/DP-47/ DP-M107R/DP-M97R/DP-M97) operation (CD)

Play/pause key (►/II)
When this key is pressed with a compact disc loaded in the compact disc player, the disc is played. (Same function as the play key on the compact disc player.)
When this key is pressed during play, the player enters the pause mode. To release pause mode, press it again.
Stop key (■)
Press to cancel all operations. The pickup returns to the beginning of the first tune and the player enters the standby mode. (Same function as the stop key on the compact disc player.)
Music skip key (►►I)
Press to skip to the beginning of the next tune. The pickup is advanced to the forward tunes by the number of times it is pressed. (Same function as the music skip key on the compact disc player.)
Music skip key (I◄◄)
Press to return to the beginning of the current tune. Pressing it again returns the pickup to the beginning. When the key is continuously pressed, the pickup returns to the backward tunes by the number of times it is pressed. (Same function as the music skip key on the compact disc player.)

Disc select key
When a multiple CD player (DP-M107, DP-M97R, DP-M97) is connected, this key selects one of six (or seven) CDs sequentially in a cycle.



❹ Tuner (KT-87/KT-57) operation keys (TUNER)

Direct (KT-87 only)
When this key is pressed, the unit is set to direct mode and the frequency of the desired station can directly be input using 10-key.
[A/B]
Each time this button is pressed, the preset station range is changed.
P. Scan
When this key is pressed, the preset stations are automatically received from A -1 for a specified time.
Band select keys (FM/AM)
Select the desired band for broadcast listening.
(Same function as the band selector on the tuner.)

❺ Cassette deck operation keys (KX-97CW, KX-77CW, KX-67W....TAPE A/B) (KX-87CR....TAPE B only)

Stop key (■)
Press to stop tape running.
Rewind key (◄◄)
Press to fast-wind the tape to the left reel.
Fast-forward key (►►)
Press to fast-wind the tape to the right reel.
Reverse Play key (◄)
Press to start playback in reverse direction. (Rear side playback)
When use the KX-77CW, the Reverse Play Key (◄) of the TAPE-A dose not function. When use the KX-67W, the Reverse Play Key (◄) of the TAPE-A and TAPE-B dose not function.
Play key (►)
Press to start playback in forward direction. (Front side playback)
Pause key (II)
Press to stop play back or recording momentarily.
The function of the PAUSE key.
Record key (REC) (●)
Press to start recording.

❻ Input selector keys

PHONO: To listen to a source from the turntable connected to the PHONO jacks, press this switch.
CD: To listen to a source from the CD player connected to the CD jacks, press this switch.
TUNER: To listen to a source from the tuner connected to the TUNER jacks, press this switch.
TAPE-1: To listen to a source from the tape deck connected to the TAPE 1 jacks, press this switch.
TAPE-2: To listen to a source of the tape deck, etc., connected to the TAPE 2 jacks, press this switch.
VIDEO 1: To listen to a source from the equipment connected to the VIDEO 1/AUX jacks, press this switch.
VIDEO 2: To listen to an audio source from video cassette recorder connected to the VIDEO 2 jacks, press this switch.

Note:
VIDEO 3/AUX do not function with this unit.

❼ POWER switch (U.S.A. and military models)

AUDIO: Press to turn the stereo system ON. Press again to turn the stereo system OFF.

TV: Press to turn the TV ON. Press again to turn the TV off.

❼ POWER switch (other models)

Press to turn the power on for whole system.

❽ TV (KMT-1026, KMT-2026S) operation keys (TV FUNCTION) (U.S.A. and military models)

Note: With the supplied remote control unit, only KMT-1026, KMT-2026S (monitor TV) can be operated.

TV/VIDEO key

Use this key to select the type of signal that the monitor will receive: TV, VIDEO 1 or VIDEO 2.

RECALL key

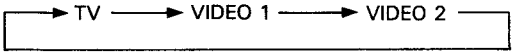
Press the recall key and both the time and channel will be displayed continuously. Press it again and they will disappear. The timer function can be utilized as well but the time will not continuously be displayed.

Channel tuning UP/DOWN keys (TV CH.) (△/▽)

Press the channel up (△) key to tune in higher channels, and the channel down (▽) key to tune in lower channels. Press the key continuously until the channel number you wish to receive appears on the upper right side of the screen.

ANT/AUX key

Press this key to set the ANT and AUX indicator to agree with the antenna input source.



TIMER key

Press the timer key to set desired time.

VOLUME keys

Apply steady pressure to the VOLUME UP or DOWN buttons, to increase or decrease the volume as desired.

❾ Surround volume keys (REAR LEVEL)

These surround volume keys (REAR LEVEL) function the same as the LEVEL (UP, DOWN) keys on the optional SS-97 Surround processor.

- This key is effective only when the optional SS-97 Surround Processor is used.

❿ MUTING key (MUTE)

Press to decrease the volume level instantaneously. Pressing it again resumes the previous volume level. When this key is pressed, to minimize the volume, the power switch OFF and ON.

⓫ Amplifier (KC-207) operation keys (These function same as the operation keys on the amplifier.) VOLUME keys (UP/DOWN)

Controls the volume of the speakers and headphones. Press the UP (△) key to increase the volume level and, press the DOWN (▽) key to decrease it.

Note:

The volume is raised up to the level preset at the control amplifier.

⓬ Turntable (KD-77F, KD-67F, KD-47F) operation keys (PHONO)

Play key (◁)

Press to start record play automatically.

For KD-67F, select the record size when turning the power on, before starting play with this key.

Stop key (■)

Press to stop play; the tonearm returns to the rest and the platter stops rotating.

Auto function

(PHONO, TUNER, CD, TAPE, VIDEO)

For example, when you listen to the record, pressing the VIDEO 1 key enters the units VIDEO mode and vice vasa.

In case of difficulty

If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your KENWOOD dealer or service representative.

Control amplifier

AM, FM, PHONO, CD, VIDEO or Tape playback	Cause	Remedy
Power on but no sound.	a) Power cord not plugged in. b) Poor connection at AC outlet. Power outlet inactive. c) VOLUME CONTROL set fully counterclockwise.	a) Check plug contact. b) Check outlet using a lamp or other appliance (outlet may be controlled by a wall switch). c) Set the control to your preference.
No sound from left and right.	a) Speaker cords disconnected. b) No input selector switch is in use. c) The TAPE-2 switch is set to ON.	a) Check speaker connections. b) Push one of the input selector switches to select the desired program. c) Set the switch to OFF.
Sound from left or right, but not both.	a) Poor speaker connections. b) Defective speaker. c) BALANCE set to one extreme or the other.	a) Check connections at both ends of speaker cord. b) Reverse speakers. If problem stays with the same speaker, check the speaker. c) Check setting of BALANCE control.

PHONO playback only	Cause	Remedy
No sound from both or one speaker.	Turntable output disconnected.	Check phono cables.
Loud hum drowns out sound.	Poor ground connection at phono cable connections.	Check phono plugs, particularly outer-shell connections.
Low background hum.	Hum picked up in turntable or turntable cables.	Keep cables away from power cords. Twist left and right cables together. Reverse AC plug of turntable. Connect ground wire between turntable and GND terminal.
Background buzz.	TV signal picked up by phono cable (especially near transmitter).	Route phono cables to minimize buzz.
Howling noise at maximum volume settings.	Acoustic pickup from speaker.	Increase distance between speaker and turntable. Choose speaker locations carefully. Check turntable suspension.

Remort control

Symptom	Cause	Remedy
Remote control unit does not function.	1. Batteries are exhausted. 2. Stereo mini plug cord is disconnected from the rear panel terminal. **Note:** When the RCA pin cords are not connected to this controller, remote controller does not function. 3. Operating position is too distant from the unit (infrared sensor). 4. Record, tape or compact disc is not loaded on the component desired to be played. 5. Cassette deck desired to play is in use for recording.	1. Replace the batteries with new ones. 2. Connect it firmly. 3. Use the remote control unit (transmitter) within an operable area. 4. Set the desired source on the component. 5. Wait until the recording is over.
Volume level is not increased.	1. Volume exceeds the level set at the control amplifier. 2. Muting is activated.	1. Raise the level on the control amplifier. 2. Release it.

Specifications

PERFORMANCE

Input Sensitivity
- **PHONO** ..... 2.5 mV, 47 kohms
- **TUNER/AUX/TAPE PLAY/CD/VIDEO** ..... 150 mV, 33 kohms

Signal to Noise Ratio (IHF-A) (IHF'66)
- **PHONO** ..... 79 dB, 2.5 mV input
  85 dB, 5.0 mV input
- **TUNER/AUX/TAPE PLAY/CD/VIDEO** ..... 103 dB

Maximum Input Voltage for Phono ..... 130 mV (RMS), T.H.D. 0.03% at 1,000 Hz

Frequency Response
- **PHONO** ..... RIAA Standard Curve ±0.3 dB
  (20 Hz - 20 kHz)
- **LINE → SPEAKER** ..... 10 Hz - 70 kHz (−3 dB)

Total Harmonic Distortion
- **LINE → SPEAKER**
  - **20 Hz~20 kHz** ..... 0.004% at Rated Output
  - **1 kHz** ..... 0.003% at 1/2 Rated Output

Output Voltage and Impedance ..... TAPE REC: 150 mV/330 ohms
PRE OUT: 1000 mV/330 ohms

Loudness Control ..... +8 dB (100 Hz) (at volume −30 dB)

Graphic equalizer control
- **(60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz)** ..... ±12 dB

GENERAL

Power Consumption ..... 15 W

AC Outlet ..... 1 Switched (Except for some areas.)

Dimensions ..... W 420 mm (16-9/16″)
H 80 mm (3-1/8″)
D 272 mm (10-11/16″)

Weight (Net) ..... 3.0 kg (6.6 lb)

Note:
KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.